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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,060	07/22/2003	Bryan B. Sauer	CL1833 US NA	8260
23906 7590 01/10/2008 E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1122B 4417 LANCASTER PIKE WILMINGTON, DE 19805			EXAMINER GRAY, JILL M	
			ART UNIT 1794	PAPER NUMBER
			NOTIFICATION DATE 01/10/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-Legal.PRC@usa.dupont.com

<b>Office Action Summary</b>	Application No. 10/625,060	Applicant(s) SAUER ET AL.	
	Examiner Jill M. Gray	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,11,12 and 43-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,11,12 and 43-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

The rejection of claims 1, 3-6, 12, and 43-47 under 35 U.S.C 103(a) as being unpatentable over PCT Publication WO 03/008680 A1 (Sen) in view of PCT Publication WO 93/15251 (Gessner) is withdrawn in view of applicants' arguments.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 46 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, this claim is indefinite because it is not clear if this claim is an improvement or Jepson type claim. In particular, claim 46 does not clearly set forth a preamble comprising a general description of all the elements of the claimed combination which are conventional or known, a phrase such as "wherein the improvement comprises" and those elements which the applicant considers as the new or improved portion. See MPEP 608.01(i). Accordingly, the metes and bounds for which patent protection is being sought are not clear.

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 5, 11-12, and 43-45 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka et al., US 2004/0038028 A1 (Tanaka).

Tanaka teaches a composite fiber comprising a core component A and a thermoplastic polymer for the sheath component B. The core component A can be polypropylene and the sheath component B is a thermoplastic polymer such as polyether-ester or polyester amide, as required by claims 1, 3 and 5. See [0013] and [0014]. Tanaka also teaches that the polymer for the core component A is preferably a thermoplastic polymer having a melting point of not lower than 160°C and is typically a polymer such as polypropylene. See [0030]. In addition, Tanaka teaches that the fiber comprises polypropylene polymer in an amount within the instant claimed range as set forth in present claim 12. See [0054]. Regarding claim 11, Tanaka teaches a polypropylene that is the same as or substantially similar to that contemplated by applicants. Accordingly, the examiner has reason to believe that properties such as the comprising crystalline segments of isotactic polypropylene and amorphous segments of atactic polypropylene. Regarding claims 43-45, Tanaka teaches that the fibers can be used to form yarns, fabrics, and clothing. See [0066] and [0067]. It is noted that Tanaka does not disclose a specific embodiment of an elastomeric polymer sheath and propylene having a melting point of 160°C. Nonetheless, the disclosure of Tanaka would have lead one of ordinary skill in this art to immediately envisage said embodiment, thereby anticipating the instant claimed invention.

Therefore, the teachings of Tanaka anticipate the invention as claimed in present claims 1, 3, 5, 11-12, and 43-45.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4, 6, 12, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al., US 2002/0084550 A1 (Roberts).

Roberts teaches bristles formed from various embodiments that include bristles that can be multicomponent bristles comprising a thermoplastic elastomer sheath surrounding a core material comprising a non-elastomeric material or bristles formed from a mixture including a non-elastomeric polymer such as a relatively hard base resin, e.g. Nylon, polypropylene or PBT and a thermoplastic elastomer. See [0013] and [0015]. The thermoplastic elastomers are of the type contemplated by applicants in claims 4 and 6, such as polyether amide or polyester ester. See [0031]. In addition, Roberts teaches that the bristles can be formed from a sheath of the thermoplastic elastomer coextruded around a core of a different material that preferably is a stiff polymer, such as nylon or PBT. Note [0037]-[0038]. One of ordinary skill in this art would have been reasonably motivated to use as the stiff polymer a polypropylene polymer in view of the teaching of Roberts that non-elastomeric polymers such as a relatively hard base resin, e.g. Nylon, polypropylene, or PBT could be used with the

thermoplastic elastomers to form bristles. As to the specific type of polypropylene, it would have been obvious to the skilled artisan during routine experimentation to choose and determine the specific polypropylene commensurate with the desired properties of the end product. As to claim 12, Roberts teaches that the core material is present in amounts within the instant claimed range. See [0038]. Regarding claim 47, Roberts teaches that a compatibilizer can be added. See [0015].

Therefore, the teaching of Roberts would have rendered obvious the invention as claimed in present claims 1, 4, 6, 12, and 47.

#### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 3-6, 11-12, and 43-47 have been considered but are moot in view of the new ground(s) of rejection.

The Declaration of October 29, 2007 has been fully considered but is not found to be persuasive to overcome the prior art rejections. In particular, the declaration must compare the claimed subject matter with the closest prior art.

No claims are allowed.

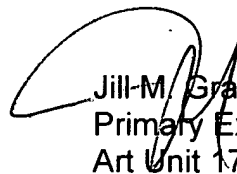
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton I. Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jill-M. Gray  
Primary Examiner  
Art Unit 1794

jmg